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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,722	06/24/2002	Simon Harrison	GILLP006	4746
22434	7590	06/29/2006	EXAMINER	
BEYER WEAVER & THOMAS, LLP			MERED, HABTE	
P.O. BOX 70250			ART UNIT	
OAKLAND, CA 94612-0250			PAPER NUMBER	
			2616	

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/049,722

Applicant(s)

HARRISON, SIMON

Examiner

Hable Mered

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 June 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Preliminary amendment filed on 6/24/2002 has been entered.
2. Claims 1-13 are pending.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1-7, 10, and 13** are rejected under 35 U.S.C. 102(e) as being anticipated by Smolentzov et al (US 6, 788, 656), hereinafter referred to as Smolentzov.

Smolentzov teaches a cellular radio communication system for a Bluetooth enabled communication devices with roaming and handoff capabilities.

5. Regarding **claim 1**, Smolentzov discloses a call-handling device (**See Figure 1, in general entity 100 and in particular elements 108, 104, 105, 106, and 107 constitute Smolentzov's call handling device**) for connecting a Bluetooth enabled communication devices (**See Figure 1, elements 101, 102, and 103 and Column 11:58-63**) to a communications network (**See Figure 1, element 112**), the call handling device comprising: at least two Bluetooth radios (**See Figure 1, elements 104 and 105**), each radio being capable of maintaining a Bluetooth connection between the call handling device and the Bluetooth enabled communications device

(See Column 5, Lines 23-36); at least one port for connecting the call handling device to the communications network **(See Figure 1, connection between 108 and 112 and Column 5:36-45)**; and, a processor **(Figure 13 a and b, element 1302 and Figure 14 , element 1402 and also see Column 12:18-50)** for controlling the Bluetooth connections, the processor being adapted to: monitor a first Bluetooth connection maintained by the radio in use **(Figure 2 and Figure 3, blocks 301-303)**; compare the first Bluetooth connection to predetermined connection criteria **(Figure 3, blocks 304 and 305. and also Column 1:61-67 and Column 7:36-50)**; and, if the first Bluetooth connection does not meet the predetermined connection criteria, establish a new second Bluetooth connection via a different radio **(See Figure 3, block 307 and Column 7:23-40 and Column 8:9-19)**.

6. Regarding **claim 2**, Smolentzov discloses a call-handling device wherein the processor is further adapted to break the first Bluetooth connection. **(See Column 8:30-32 and 8:49-51)**

7. Regarding **claim 3**, Smolentzov discloses a call handling device wherein the processor is adapted to establish the new second connection by: selecting a different radio **(In Figure 8a and 8b as discussed in Column 8:33-41 the new selected radio is BRFP 105 and the current serving one is BRFP 104)**; establishing the second connection **(The new link to BRFP 105 from the Bluetooth enabled mobile BPP101 is established as discussed in Column 8:43-45)**; and, breaking the first connection **(See Column 8:49-51)**. **(This is simply a soft handoff process and Smolentzov teaches soft handoff process adequately in Column 8:33-51)**

8. Regarding **claim 4**, Smolentzov teaches a call handling device wherein the processor is adapted to establish the new second connection by: breaking the first connection; selecting a different radio; and, establishing the second connection. **(This is**

simply a hard handoff process and Smolentzov describes all its elements in Column 7:25-45)

9. Regarding **claim 5**, Smolentzov discloses a call handling device, wherein the processor is adapted to select a different radio by: temporarily establishing one or more second Bluetooth connections (**BPP101 has more than one Bluetooth connection in Figure 8 with BRFP radios**), each second Bluetooth connection being established via a respective different radio (**BRFP 104 and BRFP 105**); monitoring and comparing each established second Bluetooth connection (**See Figure 6, blocks 603 and 604 and Column 7:55-67**); and, selecting one of the second Bluetooth connections in accordance with the result of the comparison(**See Column 8:1-12**).

10. Regarding **claim 6**, Smolentzov discloses a call-handling device, wherein the processor monitors the signal strength of Bluetooth connections. (**See Figures 4 and 6**)

11. Regarding **claim 7**, Smolentzov discloses a call-handling device, wherein the predetermined connection criterion is predetermined signal strength. (**This is inherent to any system like that of Smolentzov that measures signal strength and quality as discussed in Column 7:63-67 and generates neighboring radio (i.e. BRFP) list based on the measurement result as further elaborated in Figures 4 and 5 and a switch is made on the strength on the link. The strength of the signal has to be compared to some predetermined value in order to determine the signal and link quality.**)

12. Regarding **claim 10**, Smolentzov discloses a call-handling device, wherein the processor is adapted to maintain the connection between the call handling device and communications network whilst the second connection is established. (**This is a soft handoff process and Smolentzov teaches soft handoff process adequately in Column 8:33-51**)

13. Regarding **claim 13**, Smolentzov discloses a call-handling device according to any of the preceding claims, wherein the communications network is one of a PBX,

PSTN, POTS or the Internet. **(Figure 1 shows control node BCCFP 108 is connected to PSTN/PLMN in Figure 1 and see also Column 5:7-44)**

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. **Claims 8, 9, 11, and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Smolentzov in view of Arazi et al (US 6, 430, 395), hereinafter referred to as Arazi.

15. Regarding **claims 8 and 9**, Smolentzov teaches all aspects of the claimed invention as set forth in the rejection of claim 1 but fails to teach monitoring the number of errors detected in the Bluetooth connection, wherein the predetermined connection criteria is a predetermined number of errors in a predetermined amount of time.

Arazi teaches a wireless PBX (WPBX) and communication between a Bluetooth enabled mobile devices and base stations and WPBX.

Arazi discloses monitoring the number of errors detected in the Bluetooth connection, wherein the predetermined connection criterion is a predetermined number of errors in a predetermined amount of time. **(Column 15:15-17, Column 22:40-45, Column 23:4-44, and Column 37:14-20)**

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Smolentzov's apparatus to incorporate monitoring the number of errors detected in the Bluetooth connection, wherein the predetermined connection criterion is a predetermined number of errors in a

predetermined amount of time. The motivation being such a scheme provides a better means of determining the quality of a Bluetooth connection and when to switch from one Bluetooth connection to another during a handoff.

16. Regarding **claims 11 and 12**, Smolentzov teaches all aspects of the claimed invention as set forth in the rejection of claim 1 but fails to teach a call handling device, wherein the processor is adapted to establish the second connection using the Bluetooth headset profile and the communications device comprises one of a Bluetooth enabled headset, a Bluetooth enabled phone, or a Bluetooth enabled PDA with voice communication facilities.

Arazi discloses a call handling device, wherein the processor is adapted to establish the second connection using the Bluetooth headset profile and the communications device comprises one of a Bluetooth enabled headset, a Bluetooth enabled phone, or a Bluetooth enabled PDA with voice communication facilities. **(See Column 2:37, Column 8:36-46, Table 1 on Page 19, and Column 39:5-10)**

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Smolentzov's apparatus to incorporate establishing the second connection using the Bluetooth headset profile and the communications device comprises one of a Bluetooth enabled headset, a Bluetooth enabled phone, or a Bluetooth enabled PDA with voice communication facilities. The motivation of using such a variety of Bluetooth enabled devices is that it helps to extend IP services over Bluetooth technology at a very low cost.

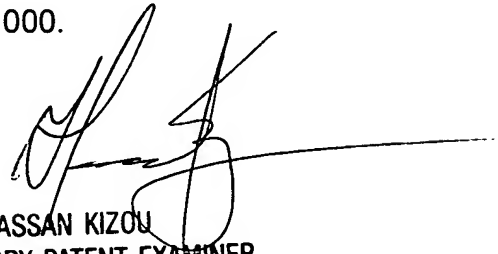
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Habte Mered whose telephone number is 571 272 6046. The examiner can normally be reached on Monday to Friday 9:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571 272 3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HM
06-24-2006



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